

CLAIMS

1. A power transmission comprising:
 - an input shaft;
 - an output shaft;
 - a first planetary gearset having a sun gear member, a ring gear
 - 5 member, and a planet carrier assembly member;
 - a second planetary gearset having a sun gear member, a ring gear member, and a planet carrier assembly member;
 - six mechanical torque-transmitting mechanisms that are selectively engageable in a plurality of combinations to establish at least ten
 - 10 forward speed ratios and a least one reverse speed ratios between the input shaft and the output shaft;
 - a first of said torque-transmitting mechanisms being selectively connectible between said input shaft and each of said members of said first planetary gearset;
 - 15 a second of said torque-transmitting mechanisms being selectively connectible between the ring gear member and planet carrier member of the first planetary gearset with a third of the torque-transmitting mechanisms;
 - said third of said torque-transmitting mechanisms being selectively connectible with each of said members of said second planetary
 - 20 gearset;
 - a fourth of said torque-transmitting mechanisms being selectively connectible between the planet carrier member and sun gear member of said second planetary gearset and a transmission housing;
 - a fifth of said torque-transmitting mechanisms being selectively
 - 25 connectible between said planet carrier member and said ring gear member of said second planetary gearset and said transmission output shaft; and

a sixth of said torque-transmitting mechanisms being selectively connectible between said sun gear member and said planet carrier member of said first planetary gearset and said transmission housing.

2. The power transmission defined in claim 1, further wherein each of said planetary gearsets has a single ring gear member and a single sun gear member; and

wherein the first of said planetary gearsets is a compound
5 planetary gearset having pairs of intermeshing pinion gears, which mesh with said ring gear member and said sun gear member, respectively.

3. The power transmission defined in claim 2, further comprising:

said second planetary gearset being a simple planetary gearset having a single set of pinion gears rotatably mounted on a planet carrier
5 member and disposed in meshing relationship with both said sun gear member and said ring gear member.